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PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/897,742	07/02/2001	Eun-Jun Kwak	3598-15	8177
75	90 07/02/2004		EXAMI	NER
M. Arthur Auslander Auslander & Thomas		CHANG, JON CARLTON		
505 Eighth Ave			ART UNIT	PAPER NUMBER
New York, NY	10018-6505		2623	1
			DATE MAILED: 07/02/2004	· 1

Please find below and/or attached an Office communication concerning this application or proceeding.

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Technology Center 2600

		Application	on No.	Applicant(s)	
		09/897,74	12	KWAK, EUN-JUN	
	Office Action Summary	Examine		Art Unit	
		Jon Char	g	2623	_
T Period for R	he MAILING DATE of this communicely	cation appears on the	cover sheet with the c	orrespondence ad	dress
THE MA - Extension after SIX - If the peri - If NO peri - Failure to Any reply	TENED STATUTORY PERIOD FO ILING DATE OF THIS COMMUNION as of time may be available under the provisions of (6) MONTHS from the mailing date of this common od for reply specified above is less than thirty (30) and for reply is specified above, the maximum state reply within the set or extended period for reply we received by the Office later than three months and attent term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(a). In no evunication. of days, a reply within the state the control will apply and will, by statute, cause the app	ent, however, may a reply be tim utory minimum of thirty (30) days ill expire SIX (6) MONTHS from lication to become ABANDONEI	nely filed s will be considered timely the mailing date of this co D (35 U.S.C. § 133).	
Status					
1) <u></u> Re	esponsive to communication(s) filed	d on			
2a) <u></u> Th	is action is FINAL . 2	b)⊠ This action is n	on-final.		
•	nce this application is in condition for seed in accordance with the practic	·	•		e merits is
Disposition	of Claims				
4a) 5)∭ Cla 6)⊠ Cla 7)⊠ Cla	aim(s) <u>1-6</u> is/are pending in the app Of the above claim(s) is/are aim(s) is/are allowed. aim(s) <u>1-3</u> is/are rejected. aim(s) <u>4-6</u> is/are objected to. aim(s) are subject to restrict	e withdrawn from co			
Application	Papers				
9) <u></u> Th€	e specification is objected to by the	Examiner.			
10)⊠ The	e drawing(s) filed on <u>02 July 2001</u> i	s/are: a)⊠ accepte	d or b)☐ objected to b	y the Examiner.	
•	plicant may not request that any objec	- · ·	•	• •	
	placement drawing sheet(s) including e oath or declaration is objected to	•	• • • •		, ,
Priority und	er 35 U.S.C. § 119				
a)⊠ <i>/</i> 1.[2.[3.[knowledgment is made of a claim fall b) Some * c) None of: ☐ Certified copies of the priority of ☐ Copies of the certified copies of application from the Internation the attached detailed Office action	documents have bee documents have bee of the priority documental Bureau (PCT Rul	n received. In received in Application In received in Application In received In received in received In received.	on No ed in this National	Stage
Attachment(s)					
	References Cited (PTO-892) Draftsperson's Patent Drawing Review (PT	ΓΩ-948)	4) Interview Summary Paper No(s)/Mail Da		
3) X Information	on Disclosure Statement(s) (PTO-1449 or Fo(s)/Mail Date <u>4</u> .			atent Application (PTC)-152)

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Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,556,196 to Blanz et al. (hereinafter "Blanz").

Regarding claim 1, Blanz discloses a method for creating a caricature (column 7, lines 43-47), comprising the steps of;

- a) inputting source data for the caricature creation (column 12, lines 13-14 and 28-30);
- b) analyzing respective parts of the inputted source data and extracting a caricature model on the basis of each of the analyzed results of the parts (column 12, line 14 and 31-33; column 4, lines 65-67; column 7, lines 43-47; column 10, lines 39-60);
- c) synthesizing the results analyzed and extracted at said step b) (column 12, lines 40-41); and

d) synthesizing a background image with the result synthesized at said step c) (that part of the generated image which is not the caricature itself).

As to claim 2, Blanz discloses the method as set forth in Claim 1, wherein said source data is a figure photograph or an image picked up by a camera (column 12, lines 8-30).

Regarding claim 3, Koshimizu discloses the method as set forth in claim 2, wherein said step b) includes the steps of:

- b-1) calculating the shape of a face in said figure photograph or image (section II.1 in column 6; column 8, lines 12-13); and
- b-2) calculating bright and dark portions of said face and determining a face shape to be employed in said caricature on the basis of the calculated results (column 8, lines 17-25; bright and dark portions is implied by the light intensity and/or surface shininess).
- 3. Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by the article, "On KANSEI Facial Image Processing for Computerized Facial Caricaturing System PICASSO" by Koshimizu et al. (hereinafter "Koshimizu").

Regarding claim 1, Koshimizu discloses a method for creating a caricature, comprising the steps of;

a) inputting source data for the caricature creation (section 2.1, first sentence, "input face");

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b) analyzing respective parts of the inputted source data and extracting a caricature model on the basis of each of the analyzed results of the parts (section 3.1, first sentence and first sentence of third paragraph; section 4.3.1, page VI-298, the caricaturing is "model drive");

- c) synthesizing the results analyzed and extracted at said step b) (section 4.3.2, step 3); and
- d) synthesizing a background image with the result synthesized at said step c) (that part of the generated image which is not the caricature itself).

As to claim 2, Koshimizu discloses the method as set forth in Claim 1, wherein said source data is a figure photograph or an image picked up by a camera (e.g., Figs.5 and 9).

Regarding claim 3, Koshimizu discloses the method as set forth in claim 2, wherein said step b) includes the steps of:

- b-l) calculating the shape of a face in said figure photograph or image (section 3.2, first sentence); and
- b-2) calculating bright and dark portions of said face and determining a face shape to be employed in said caricature on the basis of the calculated results (e.g., note the bright and dark portions in Fig.4).

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Allowable Subject Matter

4. Claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

References Cited

- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- U.S. Patent 6,385,628 to Massarsky discloses a method of creating a caricature of an image of a user, which establishes control points, the distances between which are altered.
- U.S. Patent 6,484,901 to Kim discloses an automatic vending machine for producing a caricature printed article.
- "3D Modeling System of Human Face and Full 3D Facial Caricaturing" by Fujiwara et al. teaches a method for 3D facial caricaturing.

"Automatic View Based Caricaturing" by Pujol et al. teaches a method for generating caricatures using image operators.

"KANSEI Facial Caricaturing Based on the Eye-Camera Interface from Gallery" by Tominaga et al. teaches generating a caricature based on visual information acquired from an eye-camera.

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"On Autonomous Control Method for Facial Caricature Generation Based on a Model of Visual Illusion" by Murakami et al. teaches using visual illusions to control exaggeration process in caricaturing.

Published European Patent Application EP 0 990 979 A1 discloses an image transformation device for producing caricatures.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jon Chang whose telephone number is (703)305-8439. The examiner can normally be reached on M-F 8:00 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703)308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jon Chang O

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Jon Chang June 28, 2004

Notice of References Cited

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Examiner	Art Unit		
Jon Chang	2623	Page 1 of 2	

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	Α	US-6,385,628	05-2002	Massarsky, Yefim	715/502
	В	US-6,484,901	11-2002	Kim, Jae-Sung	221/7
	С	US-6,556,196	04-2003	Blanz et al.	345/419
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	Ν	EP 990979 A1	04-2000	European Patent	VACHETTE et al.	G06F 03/00
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		TOW I WILLIAM
*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Fujiwara et al. "3D Modeling System of Human Face and Full 3D Facial Caricaturing." Proc. 3 rd Int. Conf. on 3-D Digital Imaging and Modeling, May 28, 2001, pp.385-392.
	V	Pujol et al. "Automatic View Based Caricaturing." 15 th Int. Conf. on Pattern Recognition, vol.1, September 3, 2000, pp.1072-1075.
	w	Tominaga et al. "KANSEI Facial Caricaturing Based on the Eye-Camera Interface from Gallery." Annual Conf. of the IEEE Industrial Electronics Society, vol.1, October 22, 2000, pp.307-312.
	×	Murakami et al. "On Autonomous Control Method for Facial Caricature Generation Based on a Model of Visual Illusion." Int. Conf. on Advanced Intelligent Mechatronics, June 16, 1997, pg.29.

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Koshimizu et al. "On KANSEI Facial Image Processing for Computerized Caricaturing System PICASSO." Conf. Proc. of the IEEE Int. Conf. on Systems, Man, and Cybernetics, vol.6, October 12, 1999, pp.294-299.
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.